

# HM1016 Manufacturing Process, Intermediate Course 17.5 credits

Produktion, fortsättningskurs 1

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

#### **Establishment**

Course syllabus for HM1016 valid from Spring 2010

## **Grading scale**

A, B, C, D, E, FX, F

### **Education cycle**

First cycle

# Main field of study

Mechanical Engineering, Technology

# Specific prerequisites

Basic knowledge of:

- HM1000, materials and production 1
- HM1003, Engineering Materials and Production 2

Statistics

#### Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

#### Intended learning outcomes

After completing the theory and practice elements of the course the student will be able to:

- Selecting the metering equipment and take measurements of manufactured parts.
- Perform hardware integrity tests on the machine tool
- Apply statistical process control during production
- Customize features for automated assembly
- Apply module classification of products for simplifying the assembly variant
- Customize products for complete processing
- Adaptation of product management with irb Technology

#### Course contents

- Mechanical Metrology
- Statistical Process Control
- Machine tools
- Assembly Technology
- Complete Processing
- Irb-technology
- Automated manufacturing and assembly
- Module by-sector production

#### Course literature

Jarfors: "Tillverkningsteknologi", Liber förlag, ISBN 978-91-44-07039-1

#### **Examination**

- TEN1 Written examination, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 Exercises, 3.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

### Other requirements for final grade

Passed written exam, grading scale A-F Passed exercises and laboratory, grading scale P/F

### Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.